

Hurricane Harvey 2017 9/4/2017 – 1500 CDT Update

EXECUTIVE SUMMARY

- The remaining peroxide trailers at the Arkema facility were manually ignited on September 3, 2017 in a controlled method to eliminate the risk of an uncontrolled event. EPA issued a joint statement with the Texas Commission on Environmental Quality about a controlled burn of materials at the Arkema facility in Crosby, Texas. The Crosby Volunteer Fire Department and the Harris County Fire Marshall's Officer performed the burn.
- A staging area was secured for the Beaumont Branch and two OSCs will be mobilizing there tomorrow.
- Field response activities continued at both the Corpus Christi and Houston Branches. As areas are evaluated, the focus changes from assessment to recovery.
- Two additional Incident Objectives have been added: 1) Establish a vessel recovery strategy 2) Establish a strong interagency partnership with public and private organization to determine ownership and disposition of targets.
- Multiple Superfund Phase 2 Site inspections are planned for the next two operational periods. One Superfund Phase 2 inspection was completed this operational period.
- The Acting Regional Administrator and advisors to the Administrator are meeting this morning with the Houston Mayor and other local and state officials.
- The Acting Regional Administrator and advisors to the Administrator will be touring NPL sites with reporters from several national media outlets, and may be attending a Congressional briefing later today.

PUBLIC AFFAIRS

Acting EPA Regional Administrator Sam Coleman, in concert with Chairman Shaw of TCEQ, briefed the Mayor of Houston and other local officials this morning at the Houston Emergency Center. Afterwards, a cadre of press officials joined to tour three Superfund sites targeted for Phase 2 inspections. The 3 sites scheduled for inspection observation were US Oil Recovery, Highland Acid Pits, and San Jacinto River Waste Pits. In the afternoon, a Congressional delegation

led by Senator John Cornyn's office was to be briefed by EPA and TCEQ. Information included a recap of resources dedicated to the Hurricane Response, a summary of NPL site inspections in all the impacted counties, information on drinking water and wastewater systems, accomplishments and projections of work. Information on the recent Arkema facility activities was provided as well.

ARKEMA

- After a successful controlled burn of the remaining six trailers yesterday, local
 authorities in coordination with the Harris County Health Department and in
 consultation with EPA, TCEQ, Harris County Pollution Control, and Arkema, lifted the
 1.5-mile radius evacuation order shortly after midnight. As such, Arkema is working
 with the local authorities to complete the re-population of the residents affected by the
 evacuation order.
- Incident operations are gradually shifting to assessment of conditions within the facility to determine if re-entry of repair personnel is safe. An operational priority is to establish temporary cooling capabilities within the warehouse where approximately 750K lbs of ambient temperature organic peroxide is currently being stored. This material has a very high Self-Accelerating Decomposition Temperature (SADT) and does not currently pose an imminent threat of decomposition, but as a precaution and in concurrence with UC, the RP is proceeding with a temporary cooling system. At this time, the most practical approach is to place four tons of dry ice inside the building where the peroxide is currently being stored.
- At 1015 an Arkema and Harris County Fire Marshall's Office assessment team indicated that the building with the high SADT peroxide was safe to enter in order to place the dry ice. This determination was made in response to indoor temperature readings within the bays of stored material found to be below 60° F, significantly below the lowest SADT of 104° F. Dry ice placement should be completed by mid-afternoon.
- EPA responders/assets will remain at the site for the remainder of the operational period and demobilize this afternoon.
- 1 EPA, 1 START

PORT ARTHUR/BEAUMONT

EPA has secured an operational staging area in the parking lot of the Central Mall, adjacent to the U.S. Coast Guard (USCG) Marine Safety Unit (MSU) in Port Arthur. Two EPA OSCs are mobilizing from Houston tomorrow along with GIS/Data Support. Currently, most of the area is still inaccessible due to flooding. EPA will continue to coordinate with local, state and federal response partners to plan for further assessment and potential response actions once the flood waters recede. The priority for the next operational period is to set up command posts with work space and continue developing an operational structure to begin field operations.

DEBRIS RECOVERY

No new information.

AIR MONITORING

EPA's mobile air monitoring Trace Atmospheric Gas Analyzer (TAGA) bus along with EPA personnel will be arriving in Houston today.

The Louisiana Department of Environmental Quality has offered EPA the used of its Mobile Air Monitoring Lab to collect air data in the Beaumont/Port Arthur area.

An EPA Team began mobile air monitoring in the Manchester community (Houston Branch). At least six locations were monitored, all monitoring results were at background conditions.

EMERGENCY RESPONSE

| Daily/Cumulative Summary of Hazard Evaluations/Recovery | | | | | | | | |
|---|--------------------------|---|---|--|--|--|--|--|
| O | pened | Closed | | | | | | |
| 9/3/2017 | Cumulative | 9/3/2017 | Cumulative | | | | | |
| 6 | 43 | 11 | 50 | | | | | |
| 26 | 94 | 7 | 10 | | | | | |
| 0 | 3 | 0 | 0 | | | | | |
| | 9/3/2017 6 26 0 | Opened 9/3/2017 Cumulative 6 43 26 94 0 3 | Opened C 9/3/2017 Cumulative 9/3/2017 6 43 11 | | | | | |

^{*} Note: Open means the target is yet to be recovered. Closed means the target was recovered/left in place or access was denied to collect the item.

| Daily/Cumulative Summary of Spills/Discharges | | | | | | | |
|---|----------|------------|----------|------------|--|--|--|
| G | 0 | pened | Closed | | | | |
| Status | 9/3/2017 | Cumulative | 9/3/2017 | Cumulative | | | |
| Corpus Christi Branch | 9 | 339 | 2 | 28 | | | |
| Houston Branch | 0 | 30 | 2 | 3 | | | |
| NRC Reports | 2 | 21 | 0 | 7 | | | |

WATER SYSTEMS ASSESSMENT

No new information overnight.

SUPERFUND INSPECTIONS PLANNED

The updated Status/Schedule for NPL Inspections is below:

- Phase 1 41 sites completed 9/1/17
- Phase 2 11 sites require inspection
 - o Planned
 - San Jacinto 9/4/17 Miller
 - Highlands Acid Pit 9/4/17 Miller
 - French Ltd. 9/5/17 Sullivan
 - Gulfco Marine 9/5/17 Abshire
 - Malone Services 9/5/17 Miller
 - Patrick Bayou 9/5/17 Abshire
 - Petro-Chemical Systems 9/5/17 Abshire
 - Triangle Chemical 9/5/17 Sullivan
 - US Oil Recovery 9/4/17 Miller
 - Bailey Waste 9/5/17 Sullivan
 - Geneva **complete 9/3/17**

FIELD RESPONSE ACTIVITIES

As areas are evaluated, the focus changes from assessment to recovery. Several additional Oil Recovery and Container Recovery teams were added to both the Corpus Christi Branch and Houston Branch.

The table below displays the teams deployed in the Corpus Christi and Houston Branches during this operational period:

| Quantity and Types of Teams Deployed 9/3/2017 | | | | | | | |
|---|-----------------------|-----------------------|---------------|--|--|--|--|
| Team Type | Corpus Christi Branch | Houston Branch | Port Arthur / | | | | |
| | | | Beaumont | | | | |
| Water Assessment Teams | 1 | 8 | | | | | |
| Hazard Evaluation | 2 | 21 | 4 | | | | |
| Oil Discharge Assessment | 3 | 5 | 5 | | | | |
| Container Recovery | 0 | 2 | | | | | |
| Oil Recovery Group | 2 | 0 | | | | | |
| ER/Recovery Group | 1 | 0 | | | | | |
| Arkema Group | 0 | 1 | | | | | |
| Air Operations Group | 0 | 2 | | | | | |

CORPUS CHRISTI BRANCH:

- The Corpus Christi Branch Oil Discharge Recovery Group is in the process of prioritizing vessels and contacting marinas to relocate vessels.
- The Oil Discharge Assessment Group (ODA) 1 provided oversight of the removal of oil from the Signet Enterprise at Aransas Pass. Thus far, 20,000 gallons of diesel has been removed and 280,000 gallons remains.
- ODA 1 monitored the Drill Ship DPSDS1 as it was successfully free floated with no issues or pollution observed. The Drill Ship DPSDS1 is currently enroute to Sherwin Alumina dock.
- The Corpus Christi Branch Hazard Evaluation Group transitioned from two teams to one team. The Oil Discharge Assessment Group transitioned from three teams to two teams. The Oil Discharge Recovery Group transitioned from two teams to three teams.

| | | CONTAINERS | | | | | |
|---------------|--------------------|--------------------------------|--------------------------------|-------|--|--|--|
| | Drums [55 gals] | Large Containers [<55 gals] | Large Containers [>55 gals] | TOTAL | | | |
| 9/3/2017 | 7 | 0 | 0 | 7 | | | |
| Total to date | 39 | 32 | 2 | 73 | | | |

HOUSTON BRANCH:

- The Bravo branch has received an influx of upwards of 80 personnel and is ramping up Hazard Evaluations. The Bravo branch has two deputy branch directors in order to maintain span of control.
- ASPECT is conducting assessments of the Houston area during this operational period.
- Two USCG Liaison Officers and Planning personnel include EPA and EPA START have integrated into the Houston Branch.

PORT ARTHUR/BEAUMONT BRANCH:

• The Port Arthur / Beaumont Branch should be fully stood up by Wednesday, September 6, 2017 and is currently operating with five Oil Discharge Assessment teams.

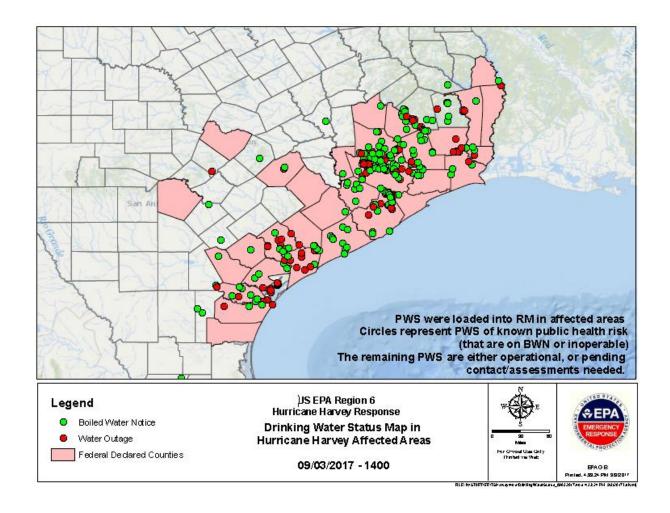
SPILL/RELEASE RESPONSE

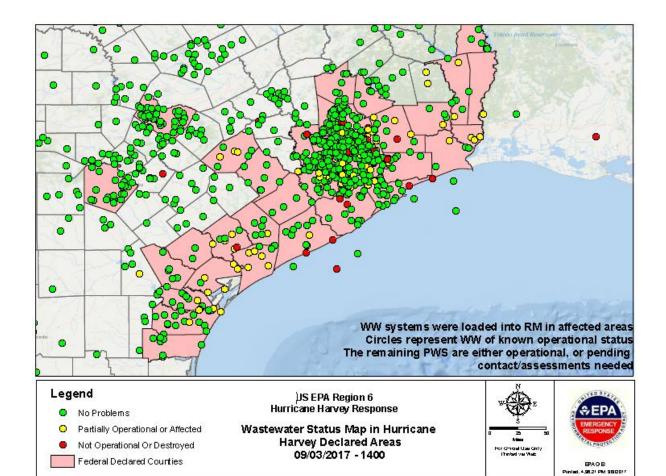
| Hotline Calls as of September 4, 2017 | | | | | | |
|--|-----|--|--|--|--|--|
| Number of Harvey Related Calls Received During Reporting Period 1300-0100 | 3 | | | | | |
| Total Number of Harvey Related Calls to Date | 139 | | | | | |

^{*} EPA is assessing each call to determine appropriate response and forwarding reports to field personnel to conduct further assessments and response as needed.

DRINKING WATER / WASTEWATER ASSESSMENTS

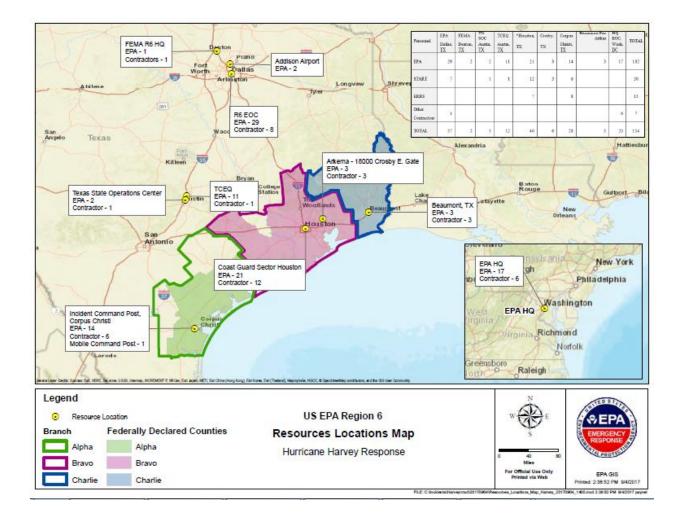
EPA continues to support TCEQ in contacting drinking water and waste water systems with 10 personnel manning TCEQ's Drinking Water and Waste Water Phone Bank located in Austin.





EPA RESOURCES

| Personnel | EPA Dallas, TX | FEMA Denton, TX | TX SOC Austin, TX | TCEQ Austin, TX | *Houston, TX | Crosby, TX | Corpus Christi, TX | Beaumont/ Port Arthur | HQ EOC, Wash, DC | TOTAL |
|----------------------|----------------------|-----------------------|-------------------------|-----------------------|-----------------|---------------|--------------------------|--------------------------|---------------------|-------|
| EPA | 29 | 2 | 2 | 11 | 21 | 3 | 14 | 3 | 17 | 102 |
| START | 7 | | 1 | 1 | 12 | 3 | 6 | | | 30 |
| ERRS | | | | | 7 | | 8 | | | 15 |
| Other Contractors | 1 | | | | | | | | 6 | 7 |
| TOTAL | 37 | 2 | 3 | 12 | 40 | 6 | 28 | 3 | 23 | 154 |



FUNDING SEPTEMBER 4, 2017

| | | Funding Ceiling | | | | Days |
|------------------------|------------------------|------------------------|----------------|-------------------|-----------------|-----------|
| Funding Sources | Funding Ceiling | Less Indirect | Spent to Date | Remaining Balance | Daily Burn Rate | Remaining |
| Non Mission Assignment | N/A | | \$64,200.00 | \$0.00 | | |
| MA 4332DR-TX-EPA-01 | \$20,000.00 | \$17,654.00 | \$0.00 | \$17,654.00 | | 25.45 |
| MA 4332DR-TX-EPA-03 | \$8,592,000.00 | \$7,584,077.00 | \$2,628,702.00 | \$4,955,375.00 | \$197,752.84 | 25.15 |
| Totals: | \$8,612,000.00 | \$7,601,731.00 | \$2,692,902.00 | \$4,973,029.00 | | |
| | | | | | | |

^{**} Indirect costs represent the money the Cincinnati Shared Service Center takes off the top to manage the Mission Assignments

REFINERIES/FUEL WAIVERS

No New Information.

The Department of Energy authorized the Strategic Petroleum Reserve (SPR) to negotiate and execute an emergency exchange agreement with the Phillips 66 Lake Charles Refinery. This decision will authorize 200,000 barrels of sweet crude oil and 300,000 barrels of sour crude oil to be drawn down from SPR's West Hackberry, Louisiana (LA) site and delivered via pipeline to the

^{*}Burn rate does not include daily ERRS amounts, not yet received. The burn does include START & ASPECT.

Phillips 66 refinery.

Four No Action Assurance (NAA) letters were signed by EPA on September 1, 2017, to help address fuel shortages. NAAs will help expedite the distribution of existing gasoline supplies in both Texas and Louisiana while the refineries work to re-start and resume normal operations. For each NAA, EPA will exercise discretion not to pursue enforcement for violations of the regulations identified in the NAAs. Each NAA is effective for two weeks, or until September 15. It is anticipated that these NAAs will allow for the immediate distribution in Texas of 10 million or more gallons of gasoline to consumers.

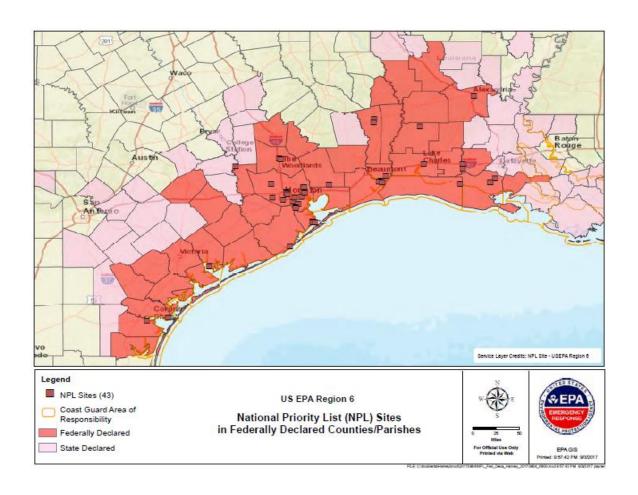
Texas NAA for Vapor Recovery Systems: Several federal regulations and the Texas State Implementation Plan (SIP) require that bulk gasoline, marine, and rail loading terminals operate a vapor control system to collect the fuel vapors displaced from tank trucks during product loading. This NAA allows the loading and unloading of fuel at terminals that have damaged or inoperable vapor recovery devices or that are otherwise not equipped with such devices.

Texas NAA for Truck Loading at Petroleum Distribution Terminals: Several federal regulations and the Texas SIP require that gasoline tank trucks obtain testing and certification that the tank trucks are vapor tight. This NAA allows tank trucks to load and unload fuel at terminals even though the trucks may not be registered with the terminals as having completed all the testing for tank tightness or have the documentation on hand to prove it.

Texas NAA for Roof Landings at Gasoline Storage Vessels: This relates to several federal regulations and the Texas SIP covering storage vessels with external floating roofs. Specifically, when the operator removes product from the vessel such that the roof lands on the vessel's legs, such action must be a continuous motion, i.e. the process of re-filling the vessel must begin immediately after roof landing. This NAA will allow roof landings without requiring immediate re-filling of the vessel.

Louisiana NAA for Truck Loading at Petroleum Distribution Terminals: Several federal regulations and the Louisiana SIP require that gasoline tank trucks obtain testing and certification that the tank trucks are vapor tight. This NAA allows tank trucks to load and unload fuel at terminals even though the trucks may not be registered with the terminals as having completed all the testing for tank tightness or have the documentation on hand to prove it.

SUPERFUND NPL SITES



SUPERFUND NPL SITES (Continued)

| Superfund Sites within Federally Declared Counties | | | | | | |
|--|---------------------------------|------------------------------|-----------|----------------------------------|-------------------------|--|
| Hurricane Harvey Rapid Response Assessment | Phase 1 | Phase 2 Phase 3 | | | A II Di | |
| Site Name | Rapid Response Assessment | Site Inspection Needed | Inspected | Additional Response Action | All Phases Completed | |
| | | XAS | | | - | |
| ALCOA (Point Comfort) / LAVACA BAY | 8/29/2017 | No | | | 8/29/2017 | |
| BAILEY WASTE DISPOSAL | 9/1/2017 | Yes | | | | |
| BRINE SERVICE CO. | 8/30/2017 | Yes | 8/30/2017 | No | 8/30/2017 | |
| BRIO REFINING INC. | 9/1/2017 | No | | | 9/1/2017 | |
| CONROE CREOSOTING COMPANY | 9/1/2017 | No | | | 9/1/2017 | |
| CRYSTAL CHEMICAL CO. | 8/30/2017 | No | | | 8/30/2017 | |
| DIXIE OIL PROCESSORS INC. | 9/1/2017 | No | 9/20/2017 | NT- | 9/1/2017 | |
| FALCON REFINERY | 8/30/2017 9/1/2017 | Yes | 8/30/2017 | No | 8/30/2017 | |
| FRENCH, LTD. GENEVA INDUSTRIES / FUHRMANN | 9/1/2017 | Yes | | | | |
| ENERGY | 9/1/2017 | Yes | 9/3/2017 | No | 9/3/2017 | |
| GULFCO MARINE MAINTENANCE | 9/1/2017 | Yes | | | 0/4/0045 | |
| HARRIS (FARLEY STREET) | 9/1/2017 | No | | | 9/1/2017 | |
| HART CREOSOTING | 9/1/2017 | No | | | 9/1/2017 | |
| HIGHLANDS ACID PIT | 9/1/2017 | Yes | | | 0/1/2017 | |
| JASPER CREOSOTING | 9/1/2017 | No | | | 9/1/2017 8/29/2017 | |
| JONES ROAD GROUNDWATER PLUME | 8/29/2017 | No | | | 8/29/2017 | |
| MALONE SERVICES COMPANY MANY DIVERSIEIED INTERESTS, INC. | 9/1/2017 | Yes | | | 9/1/2017 | |
| MANY DIVERSIFIED INTERESTS, INC MOTCO, INC. | 9/1/2017 8/31/2017 | No No | | | 8/31/2017 | |
| NORTH CAVALCADE STREET | 8/29/2017 | No | | | 8/31/2017 | |
| PALMER BARGE LINE | 9/1/2017 | No | | | 9/1/2017 | |
| PATRICK BAYOU | 9/1/2017 | Yes | | | 9/1/2017 | |
| PETRO-CHEMICAL SYSTEMS, INC. | 9/1/2017 | Yes | | | | |
| (Turtle Bayou) SAN JACINTO RIVER WASTE PITS | 9/1/2017 | Yes | | | | |
| SHERIDAN DISPOSAL | 9/3/2017 | No | | | 9/3/2017 | |
| SIKES DISPOSAL PITS | 8/29/2017 | No | | | 8/29/2017 | |
| SOL LYNN / INDUSTRIAL TRANSFORMERS | 8/29/2017 | No | | | 8/29/2017 | |
| SOUTH CAVALCADE STREET | 8/29/2017 | No | | | 8/29/2017 | |
| STAR LAKE CANAL | 8/30/2017 | No | | | 8/30/2017 | |
| STATE MARINE OF PORT ARTHUR | 9/1/2017 | No | | | 9/1/2017 | |
| TEX-TIN CORP. | 9/1/2017 | No | | | 9/1/2017 | |
| TRIANGLE CHEMICAL COMPANY | 9/1/2017 | Yes | | | 7,7,2,2,7 | |
| UNITED CREOSOTING CO. | 9/1/2017 | No | | | 9/1/2017 | |
| US OIL RECOVERY | 9/1/2017 | Yes | | | | |
| | LOUI | SIANA | | | | |
| AMERICAN CREOSOTE DERIDDER | 9/1/2017 | No | | | 9/1/2017 | |
| D.L. MUD, INC. | 8/29/2017 | No | | | 8/29/2017 | |
| EVR-WOOD TREATING/EVANGELINE REFINING COMPANY | 9/1/2017 | No | | | 9/1/2017 | |
| GULF COAST VACUUM SERVICES | 8/29/2017 | No | | | 8/29/2017 | |
| GULF STATE UTILITIES (North Ryan Street) | 8/31/2017 | No | | | 8/31/2017 | |
| MALLARD BAY LANDING BULK PLANT | 8/29/2017 | No | | | 8/29/2017 | |
| PAB OIL & CHEMICAL SERVICE | 8/29/2017 | No | | | 8/29/2017 | |
| SBA SHIPYARD | 9/1/2017 | No | | | 9/1/2017 | |
| RUSTON FOUNDRY | 9/3/2017 | No | | | 9/3/2017 | |
| Rapid Response Assessment Completed | STATUS S | SUMMARY | | | | |
| Sites with no further action | 33 | | | | | |
| Sites in Phase 2 | 10 | | | | | |
| <u> </u> | • | • | • | | • | |

FEMA – TEXAS COUNTIES WITH DISASTER DECLARATIONS

